

# State of the County Health (SOTCH) Report 2018

The Community Health Assessment (CHA) is conducted by Brunswick County Health Services every four years to determine the community's needs and develop programs to address the health priorities. The State of the County Health (SOTCH) Report is produced each of the three years between the CHAs to provide updates on the progress made on the health priorities and identify new health concerns. Four health priorities were identified in the 2015 CHA.

# **Health Priorities**

## **Accidental Death and Injury**

**Chronic Disease** 

**Mental Health** 

**Substance Abuse** 

## **2017 Demographics (US Census)**

Population Estimate:	130,897
Caucasian/White:	86%
African American:	10.5%
Hispanic or Latino:	4.8%
Female:	52.1%
Male:	47.9%
Under 5 Years of Age:	4.1%
Under 18 Years of Age:	15.8%
65 Years of Age and Over:	30.5%

# **Brunswick County Health Services**

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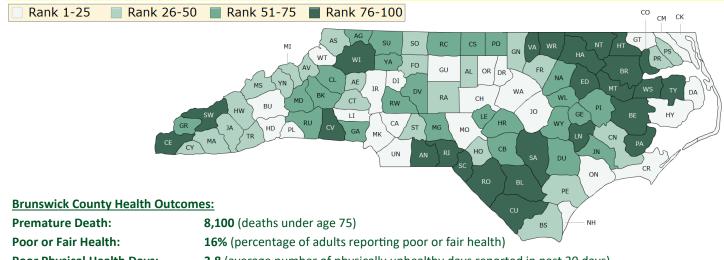
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# **Brunswick County Morbidity and Mortality Data**

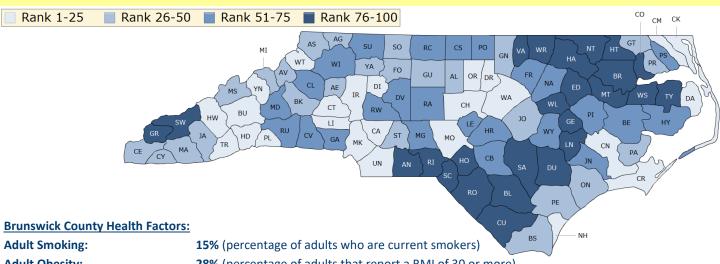
The Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute developed the County Health Rankings to measure the health of counties in the nation and rank them within the states. Each year, counties receive a Health Outcome Ranking and a Health Factors Ranking. In 2018, Brunswick County ranked 40 (out of 100 counties) for Health Outcomes and ranked 28 for Health Factors. Since 2017, Health Outcomes improved by four ranks and Health Factors improved by two ranks.

### 2018 Health Outcomes—North Carolina



**Poor Physical Health Days: 3.8** (average number of physically unhealthy days reported in past 30 days) **Poor Mental Health Days:** 3.9 (average number of mentally unhealthy days reported in past 30 days) Low Birthweight: 9% (percentage of live births where the infant weighed less than 5 lbs., 8 oz.)

### 2018 Health Factors—North Carolina



28% (percentage of adults that report a BMI of 30 or more) **Adult Obesity:** 

7.6 (index of factors that contribute to a healthy food environment, 0=worst to 10=best) **Food Environment Index: Physical Inactivity:** 21% (percentage of adults age 20 and over reporting no leisure-time physical activity) Access to Exercise Opportunities: 77% (percentage of population with adequate access to locations for physical activity)

**Excessive Drinking:** 15% (percentage of adults reporting binge or heavy drinking) Alcohol-Impaired Driving Deaths: 35% (percentage of driving deaths with alcohol involvement)

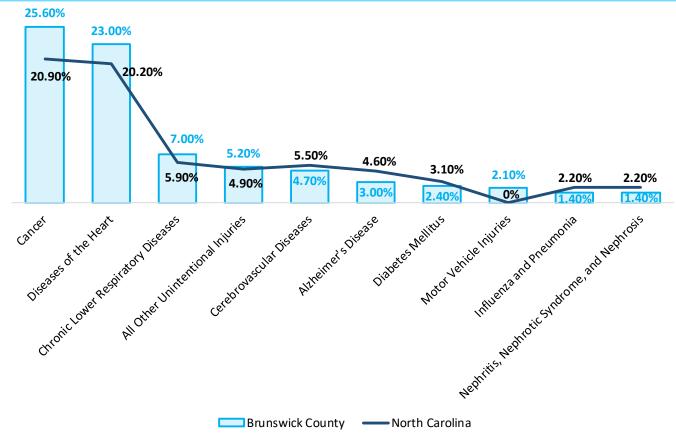
**Sexually Transmitted Infections:** 298.7 (number of newly diagnosed chlamydia cases per 100,000 population)

**Teen Births:** 33 (number of births per 1,000 female population ages 15-19)

# **Brunswick County Morbidity and Mortality Data**

## **2017 Leading Causes of Death**

Rank	Cause	Number	%
1	Cancer	394	25.6
2	Diseases of the Heart	354	23.0
3	Chronic Lower Respiratory Diseases	108	7.0
4	All Other Unintentional Injuries	80	5.2
5	Cerebrovascular Diseases	72	4.7
6	Alzheimer's Disease	46	3.0
7	Diabetes Mellitus	37	2.4
8	Motor Vehicle Injuries	32	2.1
9	Influenza and Pneumonia	21	1.4
10	Nephritis, Nephrotic Syndrome, and Nephrosis	21	1.4



Data Source: North Carolina State Center for Health Statistics

The leading causes of death show how certain health behaviors impact the community. Since 2010, cancer has been the leading cause of death in Brunswick County, followed by diseases of the heart. When compared to North Carolina state rates, Brunswick County has a lower mortality rate for diabetes; Alzheimer's disease; nephritis, nephrotic syndrome, and nephrosis; influenza and pneumonia; and cerebrovascular diseases. The mortality rate for cancer, diseases of the heart, chronic lower respiratory diseases, motor vehicle injuries, and all other unintentional injuries is higher in Brunswick County than the state.

# **Health Priorities Update: Accidental Death and Injury**

# Age-Adjusted Unintentional Injury Death Rates per 100,000 Residents

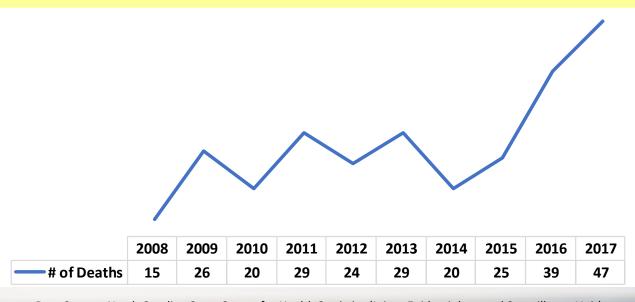
(excluding Motor Vehicle Deaths)



Data Source: North Carolina State Center for Health Statistics (Mortality Statistics Summary)

Since 2006, Brunswick County has seen a continual increase in the five year unintentional injury death rates. From 2012-2016, the death rate from unintentional injuries (age-adjusted per 100,000 residents) was 43.8 in Brunswick County compared to the statewide rate of 31.9.

## **Unintentional Medication and Drug Poisoning Deaths**



Data Source: North Carolina State Center for Health Statistics (Injury Epidemiology and Surveillance Unit)

Between 2015-2017, the unintentional medication and drug poisoning deaths in Brunswick County nearly doubled. The number of deaths in 2017 was triple the number of deaths in 2008.

# **Health Priorities Update: Accidental Death and Injury**

Unintentional injuries are a substantial contributor to premature deaths in Brunswick County. Accidental poisoning deaths resulting from the use, misuse, or abuse of illicit and prescription opioids continue to rise. Brunswick County Health Services (BCHS) collaborates with several community partners to implement evidence-based interventions to reduce the rate of unintentional medication and drug overdose deaths in the county. These interventions target heroin and other substance users, residents prescribed controlled substances, and prescription providers.

### **Medication Drop Boxes**

Unwanted, unused, or expired medications can be accidently and intentionally misused. According to the U.S. Food and Drug Administration, many abusers obtain medications from the homes of family members and/or friends. Improper disposal can also contaminate the environment and release substances into our ground water supplies. BCHS partners with the Brunswick County Sheriff's Office to encourage residents to protect their families by using the secure collection drop boxes located at several Sheriff's Office and police department locations.

## **Medication Disposal Pouches**

Free medication disposal pouches are available at BCHS. Pouches can be used to dispose of pills, liquids, and patches. Simply put unused medications inside, add water, wait 30 seconds, seal the bag and throw it away. Once adsorbed by the carbon inside the bag, the drugs are ineffective for abuse and safe for disposal in landfills. The pouch itself is environmentally friendly.

### **Medication Lock Boxes**

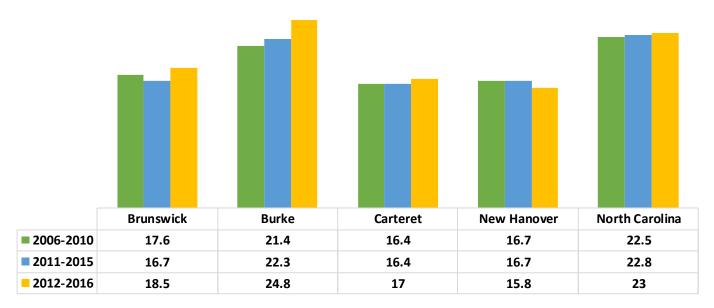
BCHS distributes medication lock boxes to families with children under age 18 living in their household. We also promote the "Lock Your Meds" campaign by providing educational pamphlets to parents about reducing the risk of accidental medication overdose in children.

### **Naloxone Kit Distribution**

Brunswick County law enforcement and EMS currently carry Naloxone, which is the reversal agent for heroin and other opioid overdoses. One of our community partners, Coastal Horizons, distributes Naloxone kits to their clients, as well as friends and families of individuals who may be at risk of an overdose.

# **Health Priorities Update: Chronic Disease**

## Age-Adjusted Diabetes Death Rates per 100,000 Residents



Data Source: North Carolina State Center for Health Statistics (Mortality Statistics Summary)

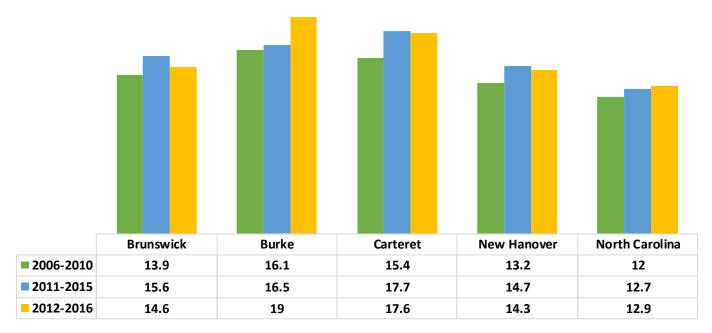
Individuals who are diagnosed with diabetes in North Carolina are more likely to be overweight or obese, and to have two or more chronic diseases (NC SCHS Behavioral Risk Factor Surveillance System). The 2018 County Health Rankings estimate that 28% of adults in Brunswick County are obese and 21% of adults age 20 and over report no leisure-time physical activity. In 2017, diabetes was the county's 7th leading cause of death and the 7th in North Carolina overall, accounting for 3.1% of all deaths in the state (NC SCHS). Between 2012 and 2016, the age-adjusted diabetes death rate in Brunswick County was 18.5 which is below the state-wide rate of 23.

Brunswick County Health Services has implemented diabetes prevention and education interventions to at-risk populations. Our goal is to decrease the number of adults with diabetes and improve the dietary habits of residents. BCHS hosts the Diabetes Self Management Education (DSME) Program, which is approved by the American Diabetes Association. The DSME Program provides education to help individuals manage their type 2 diabetes, prevent complications, and develop healthy lifestyle habits. We partner with Cooperative Extension to provide several community-based programs. Cooperative Extension facilitates Faithful Families, and the Expanded Food and Nutrition Education Program (EFNEP) to teach individuals about smart shopping, healthy eating, and the benefits of physical activity.

Another community partner, Dosher Memorial Hospital, received the Healthy People Healthy Carolinas (HPHC) grant from the Duke Endowment to implement evidence-based interventions that address chronic disease, nutrition and/or physical activity. With this funding, the Brunswick Wellness Coalition (BWC) was formed with representatives from Brunswick County Health Services, Dosher Memorial Hospital, New Hope Clinic, YMCA, and additional organizations. BWC aims to improve the County Health Ranking Health Outcomes score, decrease the obesity rate, decrease physical inactivity levels, and decrease the diabetes age-adjusted death rate.

# **Health Priorities Update: Mental Health**

## Age-Adjusted Suicide Rates per 100,000 Residents



Data Source: North Carolina State Center for Health Statistics (Mortality Statistics Summary)

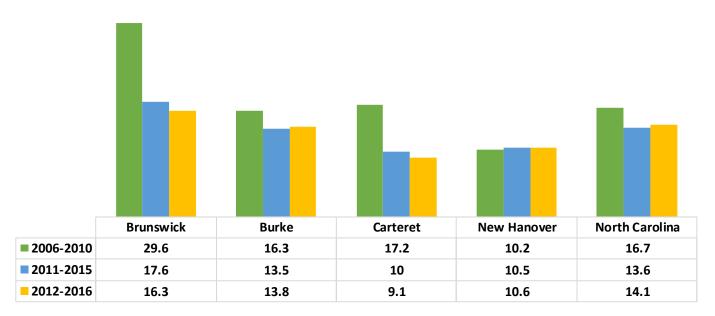
Studies have shown that mental illness, particularly depressive disorders, is strongly linked to the occurrence, successful treatment, and course of many chronic diseases including diabetes, cancer, cardiovascular disease, asthma, and obesity (Chapman et al, 2005, CDC 2015). Many risk behaviors for chronic disease such as; physical inactivity, smoking, excessive drinking, and insufficient sleep are also influenced by mental illness (Chapman et al, 2005).

Brunswick County's age-adjusted suicide rate was 14.6 per 100,000 population from 2012-2016, which is considerably higher than the Healthy NC 2020 goal of 8.3. Suicide rates in Brunswick County were lower than two peer counties from 2012-2016, but remained above the statewide rate of 12.9. Changes in the five year rates show that suicide deaths in Brunswick County are slightly decreasing. Additionally, the ratio of the county population to the number of mental health providers including psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health care is considerably higher than in peer counties and the state. In 2018, there were an estimated 1,280 residents for every mental health provider in Brunswick County (County Health Rankings Health Factors, 2018). In comparison, New Hanover County's ratio was 270:1 and North Carolina's overall ratio was 460:1.

Through several interventions, the objective of Brunswick County Health Services is to improve the overall mental health of its citizens and reduce the suicide rate. Brunswick County DHHS partnered with Trillium Health Resources to place an Access Point (resource center) in the Department of Social Services lobby that provides customized mental health information, available treatment options, and further recommendations. Our partnership with Trillium also helps to decrease the county population to mental health provider ratio by providing community members with access to online screenings for mental health and substance use disorders, online anonymous access to trained specialists who can provide immediate counseling, and resource guides for locating mental health providers.

# **Health Priorities Update: Substance Abuse**

Age-Adjusted Unintentional Motor Vehicle Injury Death Rates per 100,000 Residents



Data Source: North Carolina State Center for Health Statistics (Mortality Statistics Summary)

Data collected in the 2015 CHA shows that from 2010-2014, 600 traffic crashes occurred in Brunswick County involving alcohol, accounting for 5.8% of all traffic crashes during this time period (NC SCHS Statistics and Reports). Traffic crashes involving alcohol decreased from 6.8% in 2010 to 5.5% in 2014, which is comparable to the statewide average rate of 5% from 2010-2014. However, the percentage of alcohol-related driving deaths in Brunswick County was 38% from 2009-2013, which is much higher than in peer counties (ranging from 29% to 35%) and statewide (33%). Recent data shows that the rate of age-adjusted unintentional motor vehicle injury deaths in Brunswick County has decreased from 2012-2016.

Brunswick County Health Services has partnered with several organizations in recent years to implement initiatives to reduce the percentage of traffic crashes involving alcohol as well as improve overall driving safety.

#### Booze It and Lose It:

Increasing awareness of the dangers and penalties associated with drinking and driving, as well as high visibility enforcement, will decrease the instance of alcohol-related crashes and deaths in Brunswick County.

#### **Click It or Ticket:**

Increasing awareness of the importance of proper seat belt use for drivers and occupants, as well as high visibility enforcement, will increase seat belt use in Brunswick County.

\*High Visibility Enforcement (HVE) is a universal traffic safety approach designed to create deterrence and change unlawful traffic behaviors.\*

#### Street Safe

Driving safety education program for teens that also provides an alternative to traffic school.

## **Mental Health and Substance Abuse Initiatives**

Brunswick County Health Services is committed to preventing and improving mental health and substance use disorders by implementing and promoting various initiatives throughout the county. Our community partners work together to educate the public, promote existing programs and resources, and refer individuals to treatment providers.

#### **Coastal SE United Care**

Brunswick County has partnered with Coastal SE United Care to locate a MH/SA provider in Building F of the Government Center campus. Coastal SE takes referrals from jail, court system, and the public.

### **Brunswick County Opioid Abuse Task Force**

The Task Force is comprised of a diversified membership with one goal: reducing the amount of people with opioid addiction. Through a detailed report, it has defined its vision of attacking the opioid abuse problem in Brunswick County.

### **Opioid Website**

BC Health Services website provides opioid addiction information; forms of treatment and treatment locator links; current Brunswick County medication and drug overdose data; and additional links to evidence-based initiatives and online services.

#### **Trillium Access Point**

Brunswick County DHHS partnered with Trillium Health Resources to place an Access Point (resource center) in the Department of Social Services lobby that provides customized mental health information, available treatment options, and further recommendations.

#### **Brunswick County Substance Use and Addiction Commission**

In October 2018, the Brunswick County Board of Commissioners established the Brunswick County Substance Use and Addiction Commission to address the crisis of substance addiction and advocate to improve treatment options for individuals with substance use disorder.



# **Emerging Issue 2018: Hepatitis B**

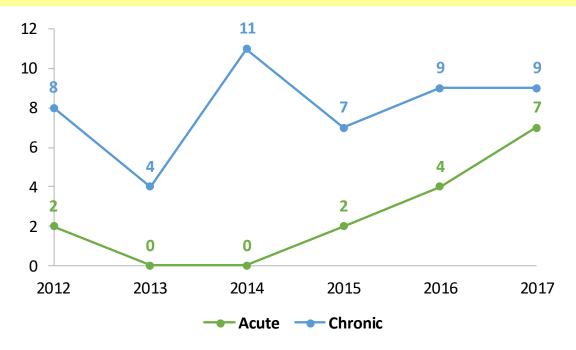
Hepatitis B is a liver infection caused by the hepatitis B virus. Hepatitis B can range from a mild illness lasting a few weeks to a serious, lifelong illness.

Acute hepatitis B is a short-term illness that occurs within the first 6 months after someone is exposed to the hepatitis B virus. An acute infection can range in severity from a mild illness with few or no symptoms to a serious condition requiring hospitalization. Acute infection can lead to chronic infection.

Chronic hepatitis B is a lifelong infection with the hepatitis B virus. Over time, chronic hepatitis B can cause serious health problems, including liver damage, cirrhosis, liver cancer, and even death.

Source: (www.cdc.gov/hepatitis/hbv/bfaq.htm)

### **Hepatitis B (2012-2017 Reported Cases)**



Data Source: (NC Disease Data Dashboard, Communicable Disease Statistics)

#### **New Initiative**

Reported cases of Acute and Chronic Hepatitis B are increasing in Brunswick County. The increase in acute cases is more concerning because it is newly infected individuals. BCHS provides testing and administers the Twinrix vaccination for Hepatitis A and B.

In 2018, BCHS established outreach events with New Hope Clinic and Shallotte Treatment Associates. BCHS nurses administered the Twinrix vaccine to seven patients in the New Hope Clinic Hepatitis C Treatment Program. Staff also visited Shallotte Treatment Associates on three occasions, and tested a total of 33 patients for Hepatitis B and C. Twinrix vaccinations were administered to 15 patients during the third visit.

## Resources

### **County Health Rankings & Roadmaps**

http://www.countyhealthrankings.org/

### North Carolina State Center for Health Statistics (NC SCHS)

http://www.schs.state.nc.us/

### **Brunswick County Sheriff's Office Medication Disposal**

http://www.brunswicksheriff.com/resources/medication-disposal

### **Diabetes Self Management Education (DSME) Program**

https://www.cdc.gov/learnmorefeelbetter/programs/diabetes.htm

### **Trillium Health Resources**

https://www.trilliumhealthresources.org/

#### **Booze It and Lose It**

https://www.ncdot.gov/programs/GHSP/initiatives/boozeitandloseit/

#### **Click It or Ticket**

https://www.ncdot.gov/programs/GHSP/initiatives/clickitorticket/

#### **Street Safe**

http://streetsafeus.com/

### **Hepatitis B**

https://www.cdc.gov/hepatitis/hbv/bfaq.htm